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PATENTAMENDMENTS TO THE CLAIMS

Claims 1-29 (Cancelled)

30. (Currently Amended) A method of forming a MOS transistor on a semiconductor material of a first conductivity type, the semiconductor material having a top surface, the method comprising:

forming a first material ~~on over~~ the top surface of the semiconductor material;
~~removing a portion of the first material to expose a region of the top surface of the semiconductor material and leave a remaining portion of the first material on~~
exposing a region of the top surface of the semiconductor material, a portion of the first material being removed and a remaining portion of the first material being left when exposing the region of the top surface of the semiconductor material;

forming a semiconductor layer of the first conductivity type on the top surface of the semiconductor material, the semiconductor layer including silicon, germanium, and carbon;

removing the remaining portion of the first material from over the top surface of the semiconductor material;

forming a layer of insulation material over the semiconductor layer;

forming a layer of conductive material on the layer of insulation material; and

removing a portion of the layer of conductive material to form a conductive gate that lies over the semiconductor layer.

31. (Previously Presented) The method of claim 30 wherein the semiconductor layer is selectively epitaxially grown.

32. (Previously Presented) The method of claim 31 and further comprising forming spaced-apart source and drain regions of a second conductivity type in the semiconductor layer.

AMENDMENT IN RESPONSE TO EXAMINER'S
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33. (Previously Presented) The method of claim 31 and further comprising forming a layer of silicon free from germanium and carbon on the semiconductor layer before the remaining portion of the first material is removed, the layer of insulation material contacting a top surface of the layer of silicon.

34. (Previously Presented) The method of claim 33 and further comprising forming spaced-apart source and drain regions of a second conductivity type in the semiconductor layer and the layer of silicon.

35. (Previously Presented) The method of claim 30 wherein the semiconductor layer is deposited.

36. (Previously Presented) The method of claim 35 and further comprising forming spaced-apart source and drain regions of a second conductivity type in the semiconductor layer.

37. (Previously Presented) The method of claim 35 and further comprising forming a layer of silicon free from germanium and carbon on the semiconductor layer before the remaining portion of the first material is removed, the layer of insulation material contacting a top surface of the layer of silicon.

38. (Previously Presented) The method of claim 37 and further comprising forming spaced-apart source and drain regions of a second conductivity type in the semiconductor layer and the layer of silicon.

39. (New) The method of claim 30 wherein the first material contacts the top surface of the semiconductor material.

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40. (New) The method of claim 39 and further comprising forming spaced-apart source and drain regions of a second conductivity type in the semiconductor layer.

41. (New) The method of claim 40 and further comprising forming a layer of silicon free from germanium and carbon on the semiconductor layer before the remaining portion of the first material is removed, the layer of insulation material contacting a top surface of the layer of silicon.

42. (New) The method of claim 41 and further comprising forming spaced-apart source and drain regions of a second conductivity type in the semiconductor layer and the layer of silicon.

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